

IN THE CLAIMS:

1-19. **(Cancelled)**

20. **(New)** A method of communicating data over a voice channel of a wireless communication system, comprising the steps of:

generating a periodic data signal modulated with data and periods of silence; and

sending the periodic data signal as a voice communication through a vocoder and over a voice channel of a wireless communication system.

21. **(New)** The method of claim 20, wherein the wireless communication system is a cellular network.

22. **(New)** The method of claim 20, wherein the network transmission standard is CDMA, TDMA, or GSM.

23. **(New)** The method of claim 20, wherein the generating step further comprises generating the periodic data signal with a data sequence using frequency shift keying.

24. **(New)** The method of claim 20, wherein the duration of each of the periods of silence is within the range of about 25 milliseconds to about 1000 milliseconds.

25. **(New)** The method of claim 20, wherein the generating step further comprises receiving a first periodic data signal and producing a second periodic data signal by modulating the first periodic data signal with the periods of silence.

26. **(New)** The method of claim 25, wherein producing the second periodic data signal further comprises the steps of:

receiving a control signal, the control signal supplying parameters for a length of the periods of silence and timing between the periods of silence; and

producing the second periodic data signal by modulating the first periodic data signal based on the received control signal.

27. **(New)** The method of claim 20, wherein the length of the periods of silence are variable.

28. **(New)** The method of claim 27, further comprising the steps of:
receiving a response to the periodic data signal over the voice channel of the wireless carrier network; and
varying the length of the periods of silence based on the response.

29. **(New)** A method of communicating data over a voice channel of a wireless communication system, comprising the steps of:

establishing a cellular voice call over a voice channel of a wireless communication system using a selected network transmission standard;

generating a periodic data signal modulated with (i) data using frequency shift keying and (ii) periods of silence at periodic time intervals; and

sending the periodic data signal to a call center over the voice channel of the wireless communication system, whereby the periodic data signal is sent over the wireless communication system using a carrier signal that is transmitted during portions of the periodic data signal that contain the data and during portions of the periodic data signal that contain the periods of silence.

30. **(New)** The method of claim 29, further comprises the steps of:

(a) generating the periodic data signal using frequency shift keying; and
(b) modulating the periodic data signal with periods of silence that are added at the periodic time intervals.

31. **(New)** The method of claim 30, wherein step (a) is carried out prior to step (b).

32. **(New)** The method of claim 29, wherein the network transmission standard is CDMA, TDMA, or GSM.